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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,365

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EXAMINER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,365	<b>Applicant(s)</b> KODAMA ET AL.	
	<b>Examiner</b> Nghii H. Ly	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04/09/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/14/07</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 6,681,125) in view of Aoto (US 6,615,055) and Tsuchiyama (US 6,246,888).

Regarding claims 1 and 7, Woo teaches a folding type portable radio communication terminal (see fig.2) comprising: a first chassis provided with a display part and a receiving part at its front surface side (see fig.2, item 12), a second chassis provided with an operation part at its front surface side (fig.2, item 13), a coupling part

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for openably/closably coupling end parts of the first and the second chassis so that the front surface sides the second chassis and the first chassis face each other (see fig.2, item 15), and a whip antenna for data transmission/reception provided in the coupling part side end part of the second chassis to be capable of being pulled out (see fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64), the whip antenna is, in the first and second communication state (see fig.2, two chassis are open), pulled out in a direction (see fig.2, the antenna 20 is pulled out).

Woo does not specifically disclose the antenna is pulled out with an inclination and is held.

Aoto teaches the antenna is pulled out with an inclination and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", see fig.2, antenna 1 with an inclination. In addition, see column 1, lines 20-25, see "*is held*", column 6, lines 1-5, see "*pulled out...and held*", column 6, lines 20-22, see "*pulled out... is held at an inclination and angle...*", column 7, lines 5-11, see "*assuredly held...in the inclination position... after the antenna 1 is pulled out*").

Woo and Aoto, after combined, does indeed teach "the antenna is pulled out in a direction of approaching a back surface side of the first chassis and is held" as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

The combination of Woo and Aoto does not specifically disclose the antenna having a first communication state which displays a reception signal in the displays a

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reception signal in the display part and a second communication state which output the reception signal from the receiving part in a state where the first and second chassis are opened.

Tsuchiyama teaches the antenna having a first communication state which displays a reception signal in the displays a reception signal in the display part and a second communication state which output the reception signal from the receiving part in a state where the first and second chassis are opened (see column 4, lines 36-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Tsuchiyama into the system of Woo and Aoto in order to to provide a method for controlling a display auto-reset function of radio paging receiver (see Tsuchiyama, column 1, lines 6-9).

Regarding claim 2, Woo as modified by Tsuchiyama teaches the whip antenna is formed into a curved shape in advance (see Woo, column 3, lines 45-58, since Woo teaches whip antenna, the teaching of Woo inherently teaches the antenna can be formed into a curved shape in advance as claimed) and the back surface side of the first chassis (see Woo, Fig.2). Woo as modified by Tsuchiyama does not specifically disclose that the antenna in pulled-out state.

Woo does not specifically disclose that the antenna in pulled-out state.

Aoto teaches the antenna approaches the back surface side of the first chassis pulled-out state (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", see fig.2, antenna 1 with an inclination).

Woo and Aoto, after combined, does indeed teach "that the antenna approaches the back surface side of the first chassis pulled-out state" as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo and Tsuchiyama so that the antenna can be adjusted for better radio signal.

Regarding claim 3, Woo as modified by Tsuchiyama teaches a folding type portable radio communication terminal and a tip of the antenna (see Woo, fig.2), and the back surface of the first chassis in the middle of an open operation of the first and the second chassis (see Woo, fig.2), and when the open operation is further performed (see Woo, fig.2). Woo as modified by Tsuchiyama does not specifically disclose a tip of the antenna can be pulled out and slid with an inclination.

Aoto teaches a tip of the antenna can be pulled out and slid with an inclination (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, include applicant's "*in the middle of an open operation of the first and the second chassis*". Therefore, the teaching of Aoto inherently teaches applicant's claimed limitation).

Woo and Aoto, after combined, does indeed teach "a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, whip antenna extended while the tip slides on the back surface the first chassis" as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo and Tsuchiyama so that the antenna can be adjusted for better radio signal.

Regarding claim 4, Woo further teaches the folding type portable radio communication is constructed in such a way that in a state where the first chassis and the second chassis are closed (see fig.2, cover 10a can be closed into main body 10b), the coupling part (see fig.2, item 15) side end part of the second chassis protrudes more than the coupling part side end part of the first chassis (see fig.2), and the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis (see fig.2, the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis as claimed).

Regarding claim 6, Woo as modified by Tsuchiyama teaches a folding type portable radio communication terminal and whip antenna according to claim 1. Woo as modified by Tsuchiyama does not specifically disclose the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held.

Aoto teaches the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination, and see fig.2, antenna 1 with an inclination. In addition, see column 1, lines 20-25, see "*is held*", column 6, lines 1-5, see "*pulled out...and held*", column 6, lines 20-22, see "*pulled out... is held at an inclination and*

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*angle...*", column 7, lines 5-11, see "*assuredly held...in the inclination position... after the antenna 1 is pulled out*". Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo and Tsuchiyama so that the antenna can be adjusted for better radio signal.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 6,681,125) in view of Aoto (US 6,615,055) and further in view of Woo as modified by Tsuchiyama (US 6,246,888) and Naoe (JP02000124732A).

Regarding claim 5, the combination of Woo, Aoto and Tsuchiyama teaches the whip antenna (see Woo, fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64). The combination of Woo, Aoto and Tsuchiyama does not specifically disclose the antenna constructed be positioned substantially at a center the coupling part side end part of the second chassis.

Naoe teaches the antenna constructed be positioned substantially at a center the coupling part side end part of the second chassis (see Abstract and fig.2, antenna 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Naoe into the system of Woo, Aoto and Tsuchiyama in order to provide the portable telephone of a structure capable



of smoothing the deterioration of the sensitivity of communication caused by the positional relation of the base station (see Naoe, Abstract).

### ***Response to Arguments***

5. a. In light of applicant's arguments during the telephone interview (dated 04/03/07) with respect to the rejection under 112 first paragraph in the previous Office action (dated 01/08/07), the examiner hereby withdraws the rejection under 112 first paragraph as stated in the previous Office action (dated 01/08/07).

b. Applicant's arguments filed 03/22/06 have been fully considered but they are not persuasive.

On page 3 of applicant's remarks, applicant argues that Aoto does not teach the antenna is pulled out in a direction of approaching a back surface side of the first chassis and is held.

In response, Woo teaches a back surface side of the first chassis (see fig.2), and Aoto teaches the antenna is pulled out with an inclination and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", see fig.2, antenna 1 with an inclination. In addition, see column 1, lines 20-25, see "*is held*", column 6, lines 1-5, see "*pulled out...and held*", column 6, lines 20-22, see "*pulled out... is held at an inclination and angle...*", column 7, lines 5-11, see "*assuredly held...in the inclination position... after the antenna 1 is pulled out*").

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Woo and Aoto, after combined, does indeed teach "the antenna is pulled out in a direction of approaching a back surface side of the first chassis and is held" as claimed.

On pages 3 and 4 of applicant's remarks, applicant argues that Aoto does not teach a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis.

In response, Woo as modified by Tsuchiyama teaches a folding type portable radio communication terminal and a tip of the antenna (see Woo, fig.2), and the back surface of the first chassis in the middle of an open operation of the first and the second chassis (see Woo, fig.2), and when the open operation is further performed (see Woo, fig.2). Woo as modified by Tsuchiyama does not specifically disclose a tip of the antenna can be pulled out and slid with an inclination.

Aoto teaches a tip of the antenna can be pulled out and slid with an inclination (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination).

Woo and Aoto, after combined, does indeed teach "a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, whip antenna extended while the tip slides on the back surface the first chassis" as claimed.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

A handwritten signature in black ink, appearing to be 'Nghi H. Ly', written in a cursive style.